



LNP™ LUBRICOMP™ Compound QAP22S

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound QAL-4522 HS

Product reorder name: QAP22S

LNP LUBRICOMP QAP22S is a compound based on Nylon 6/10 resin containing 10% PTFE/Silicone, 10% Aramid Fiber. Added features of this material include: Wear Resistant, Heat Stabilized.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	460	kgf/cm ²	ASTM D 638
Tensile Stress, break	460	kgf/cm ²	ASTM D 638
Tensile Strain, yield	1.8	%	ASTM D 638
Tensile Strain, break	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	35100	kgf/cm ²	ASTM D 638
Flexural Stress	1050	kgf/cm ²	ASTM D 790
Flexural Modulus	28100	kgf/cm ²	ASTM D 790
Tensile Stress, yield	50	MPa	ISO 527
Tensile Stress, break	50	MPa	ISO 527
Tensile Strain, yield	2.3	%	ISO 527
Tensile Strain, break	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	3310	MPa	ISO 527
Flexural Stress	76	MPa	ISO 178
Flexural Modulus	3000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	35	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	11	cm-kgf	ASTM D 3763
Multiaxial Impact	14	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	32	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	203	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.46E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	193	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	94	°C	ISO 75/Af
PHYSICAL			
Density	1.17	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.8	%	ISO 294
Wear Factor Washer	11	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.41	-	ASTM D 3702 Modified
Static COF	0.26	-	ASTM D 3702 Modified
Density	1.17	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm